velopment. Although the research that Barinaga discusses (E. Knudsen, "Capacity for plasticity in the adult owl auditory system expanded by juvenile experience," Reports, 6 Mar., p. 1531) may well add support to the idea of plasticity in the young brain in general, it says little about what the brain should learn.

Barinaga concludes by stating, "It all reinforces what Hillary Clinton and the news magazines have been telling us: that exposing our kids to more experiences at a young age may make them smarter adults. Indeed, it may physically lay down the pathways for achievement later in life." This conclusion could be read as supporting any and all kinds of stimulation aimed at infants and young children.

The owls appear to have learned at an early age because they were motivated to do so in order to survive. A young child may well have the capacity to learn a foreign language, but likely has no motivation to do so if the language is not spoken in his or her home or by the parents. The fallacy in leaping from brain to behavior is that behavior is determined by many factors other than brain capacity. A natural athlete may never realize his or her potential because of lack of motivation, whereas a less-gifted athlete may win medals thanks to sheer energy and drive.

Not all stimulation is necessarily good for young children—witness the newly imported British television program "Teletubbies," aimed at 1-year-olds, and computer programs for 6-month-olds. Brain and behavior are at such different levels of analysis and measurement that we need to be cautious in leaping from one to the other. Overstimulation of infants and young children can endanger healthy development.

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In her article about the splendid report by Knudsen, Barinaga states that the owl's eyes are "fixed in their sockets." An owl's eyes do in fact move—not a great deal, just enough for two papers (*1*). The phrase "nearly immobile" would be more accurate.

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References

1. M. J. Steinbach and K. E. Money, *Vis. Res.* **13**, 889 (1973); M. J. Steinbach, R. G. Angus, K. E. Money, *ibid.* **14**, 745 (1974).

Natron Trade, 2000 B.C.

In her article "Yemen's Stonehenge suggests Bronze Age Red Sea culture" (Research News, 6 Mar., p. 1452), Heather Pringle states that the al-Midaman culture of 4000 years ago may have acquired wealth by trading in natron because it is a key ingredient in soap. Natron was also used in large quantities in the mummification process in order to remove water from the body before it was wrapped. This would be another use for natron in trade with the Egyptians.

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Kaposi's Sarcoma and Protection from HIV Dementia

In their report "Angiogenic and HIV-inhibitory functions of KSHV-encoded chemokines" (10 Oct., p. 290), C. Boshoff *et al.* found that Kaposi's sarcoma (KS)–associated herpesvirus (KSHV) encodes chemokine-like proteins (vMIPs) that block infection of human immunodeficiency virus–type 1 (HIV-1) on the surface of cells from a CD4-positive cell line that expresses the chemokine receptor CCR3. Because CCR3 is a receptor for HIV-1 entry into microglia, Boshoff *et al.* suggest that patients with KS or high loads of KSHV might be less prone to HIV infection of microglia cells and thus less likely to develop HIV-related dementia.

We examined the relation between KS and HIV dementia in 229 deceased AIDS patients from Oslo, Norway, treated at Ullevål hospital (*1*). The sample corresponds to 91% of registered dead AIDS victims in Oslo from 1983 to 1996. The autopsy rate was 73%, and in this group the occurrence of HIV encephalitis could be studied.

HIV dementia develops gradually. The clinical diagnosis of definite and possible dementia was based on the staging described by Price and Brew, their stage 2 or more corresponding to definite dementia (*2*). The diagnosis of HIV encephalitis at autopsy was based on the presence of multinucleated giant cells (MGCs) in the brain tissue, while diffuse damage of white matter may indicate a less advanced stage of brain infection.

Among the 22 KS cases, one case of definite clinical dementia (4.5%) and three with possible dementia (13.6%) had been diagnosed. Among 207 non-KS cases, 52 had definite dementia (25.1%) and 51 had possible dementia (24.6%). Treating the numbers as a 2 × 3 table with ordered categories (definite dementia, possible dementia, and no